

Aspect-Oriented Programming with AspectC++

Part V – Summary



Pros and Cons

- + A powerful AO language combining aspects with C++ concepts
- + Easy to learn
- + No overhead at runtime
- + Suitable for embedded and cross-platform development
- + IDE support available

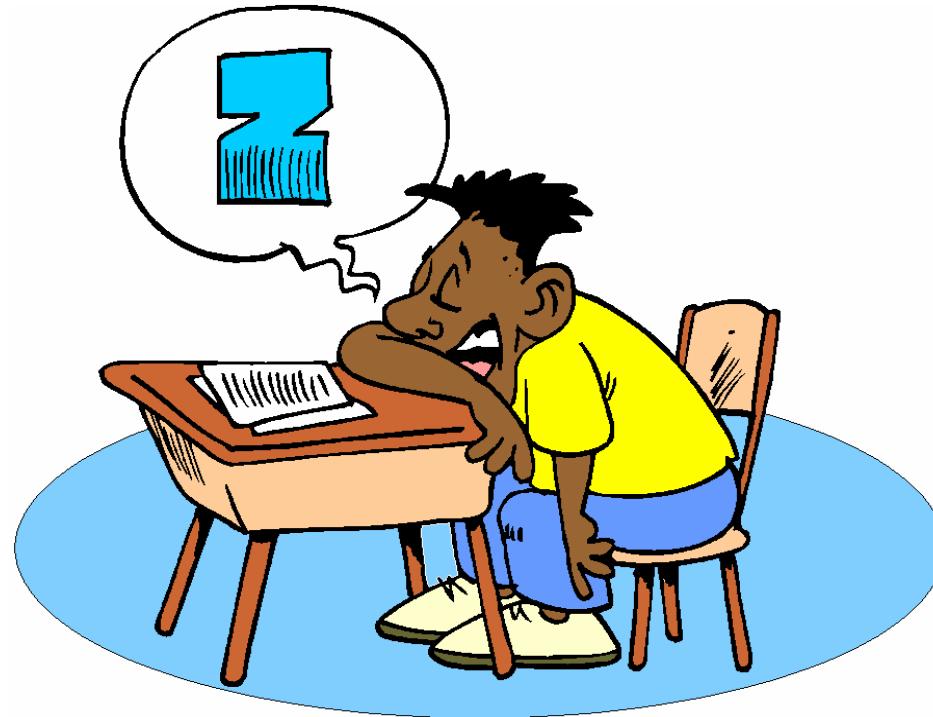
- special tool (ac++/ag++) required
- longer compilation times

Summary – This Tutorial ...

- introduced the AspectC++ language extension for C++
 - AspectJ-like language extension
 - ac++ transforms AspectC++ into C++
 - supports AOP even in resource constrained environments
- demonstrated the AspectC++ tools
- discussed the pros and cons of the approach

Future Work – Roadmap

- Language design
 - consider/support/exploit new features of C++ >= 11
 - control flow patterns
 - free variables in pointcut expressions
- Aspect weaver
 - attributes for parameters
 - weaving in templates
 - aspect/advice templates
- Tools
 - file dependency handling (faster incremental builds)
 - acmake and whole-program analysis



Thank you for your attention!